

ABSTRACT

A modularized routing system includes a control element and forwarding elements, all of which are connected via a private network, for example, an Ethernet. The control element computes a routing table for each of the forwarding elements. Based on information in the routing table, a forwarding element decrements a time-to-live counter in the packet header only if the forwarding element is the first one in the routing system encountered by the packet. Accordingly, the forwarding elements preserve the behavior of a single router while using substantially the same routing protocols as the single router.

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